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ABSTRACT

To determine whether the proposed federal legislation allowing tax credits for private schooling would move closer to achieving the goal of fiscal capacity neutrality, the author reviews the legislation, discusses its effects on students and taxpayers, and proposes a tax credit system that achieves equity for students in both public and private schools. The provisions of the 19 tax-credit bills before the 97th Congress are described, as are the Reagan Administration s preferences on the issue. It is concluded that even a compromise tax-credit bill would raise the level of public expenditure per pupil enjoyed by private school users and violate the principle of fiscal capacity neutrality. The proposed legislation would also probably lead to a reduction in the local and state tax rate to support public education. Adapting Martin Feldstein's proposals for fiscal capacity neutrality, the author proposes opening a free-market competition between public and private schools by eliminating local governments' taxing for education and granting tax credits to public and private school users on the basis of their incomes, with large enough credits to poorer taxpayers to maintain fiscal neutrality and to richer taxpayers to avoid financial recapture. (JW)

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Tax Credits for Education

John Hilley*

1982

In the last several years, there has been a growing interest in government aid to private school users. The Reagan administration and many members of Congress support a federal tax credit system as the means of aiding taxpayers with dependents enrolled in private schools. The purpose of this paper is to critically examine the idea of tax credits for private education.

The government's role in the financing of education can be justified on either efficiency or equity grounds. The major efficiency argument rests on the existence of external effects in education. Although these effects are extremely difficult to quantify, there is uniform agreement that the external benefits from elementary education are sizeable. There is less agreement on the external benefits of secondary and (particularly) post-secondary education and further research is required. Other efficiency arguments which can be used to justify a government role in the financing of education have been advanced by Nerlove. Government intervention may be necessary to deal with "uncertainty which cannot be covered by insurance and with certain intergenerational welfare comparisons which may not be adequately made in current-generation markets."[1]

However, the dominant justification for the government's role in the financing of education is based on equity arguments. More specifically, education is viewed as a major vehicle for opening up the opportunities that can lead to a rewarding and productive life. Given our country's commitment to equal opportunity, it is natural that the government should employ its statutory and fiscal powers to support the education of its citizens.

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This desire for the equitable treatment of students was clarified in the 1970's through a series of State Supreme Court decisions in which several state school finance systems were declared unconstitutional based on violations of either "equal protection" or "equal education" clauses of state constitutions. The criterion for judging the constitutionality of school finance systems which emerged was the requirement of fiscal capacity neutrality which requires that differences in the levels of expenditure per student should not be a function of differences in fiscal capacities. Although these decisions concerned state school finance systems and inter-district disparities in expenditure levels, it is easy to imagine that the Judiciary might apply the same criterion to individual students if the federal government were to directly provide funds to individuals through a tax credit system. In judging the impact of the proposed legislation, we employ the equity criterion of fiscal capacity neutrality. However, unlike the Courts, whose concern has been with disparities in per pupil expenditure levels among public school users, we apply the criterion over all students (public and private).

We begin by offering an overview of the tax credit legislation that is before the 97th Congress. We then evaluate the likely impact of this legislation on both students and taxpayers. We show that the enactment of the proposed legislation would produce results that violate the standard of fiscal capacity neutrality. The treatment of taxpayers is judged by examining the impact of the legislation on the proportion of a taxpayer's fiscal capacity that is spent on education and on the taxpayer's education residual which is the difference between the value of education services consumed by the taxpayer and his payments to support education. We find that the proposed legislation would increase the education residual of private school users relative to public school users. In addition, it is likely that the legislation would benefit wealthy taxpayers relative to poor taxpayers.

Although we find fault with the design of the currently proposed tax credit systems, a major goal of this paper is to demonstrate that a tax credit system can be designed which achieves some highly desireable efficiency and equity results. We propose a theoretical tax credit system which is capable of achieving fiscal capacity neutrality while also removing the current distortions to the choice of public vs. private schools. We then examine the treatment of taxpayers under this ideal system.

I. Income Tax Credits for Education Expenses - The Proposed Legislation

In the first two months of the 97th Congress, nineteen bills were introduced which would establish income tax credits for education expenses. Eighteen of these bills originated in the House of Representatives. The intent of this section is to describe the basic features of these bills and to highlight the similarities and dissimilarities.

The main idea underlying all the bills is that some amount of a taxpayer's education expenses would be allowed as a credit against his federal income tax. In all cases, educational expenses means expenditures on private education (there are no credits proposed on one's tax payments to support public education). In all cases, a taxpayer with several dependents who incur educational expenses is allowed the tax credit on each dependent. In every bill, a scholarship or other financial assistance received by an individual will reduce the amount of his educational expenses and may potentially reduce the size of the tax credit.

Although the bills differ regarding the levels of schooling (elementary, secondary, post-secondary) which are eligible for tax credits, the majority of the bills allow tax credits for all three levels of education. This is particularly true when we realize that in three instances the same sponsor introduced two bills, one dealing with the elementary and secondary levels and the other dealing with higher education.

The greatest difference in the bills concerns the amount of tax credit that is allowed. The most generous credits are given in Rep. Crane's bill (HR2231). Taxpayers would be allowed a credit on educational expenses up to $2000 per dependent. Expenditures on elementary, secondary or post-secondary schooling would be eligible for the credit. At the other end of the spectrum is Rep. Lederer's bill (HR336) which would limit the credit to $150 and only allow expenses on elementary and secondary education. The majority of the bills put the limit for the tax credit in the $200 to $500 range.

An interesting feature of most of the bills is that the allowable tax credit is expressed as a percentage of education expenses and then imposes a limit on the size of the credit. For example, HR1323 allows a tax credit of 50% of the education expense on elementary or secondary education but subjects the credit to an absolute limit of $250. Under this plan, a taxpayer with a tuition payment of $500 or less would have half of his expenses offset by the credit. As tuition rises above $500, the credit decreases as a proportion of the education expense. Other plans specify the allowable tax credit as 25% of expenses. Given a limit of $250, expenses would have to be at least $1000 to take the full tax credit.

Other proposals have graduated percentage allowances. For example, HR-209 allows 100% of the first $200 of expenses, 25% of expenses from $200 to $500 and 5% of expenses from $500 to $1500. This scheme implicitly establishes an absolute limit of the credit at $325.

One of the most controversial aspects of the bills is whether the tax credit should be refunded to a taxpayer whenever his tax credit exceeds his tax liability. Senate bill (S550) introduced by Packwood, Moynihan and Roth allows refunds on credits. This provision is to aid the poor whose tax liabilities may fall short of their tax credits for education. Without the refund on credits they would not enjoy the subsidy on education expenses which

is available to taxpayers with greater tax liabilities. Two of the House bills (HR1443 and HR2899) also contain refund provisions. However, none of the other 16 House bills allows refunds on credits.

An interesting provision is contained in Rep. Luian's HR2601. Here, the size of the allowable tax credit is reduced as the income of the taxpayer increases. The maximum tax credit is $200 but this amount is reduced by $1 for every $20 increase in taxable income above $18,000. Thus a taxpayer with an income over $22,000 would be ineligible for the credit. The intent of this provision is to deny the credit to those whose annual income is deemed adequate.

The Reagan Administration's Position

On June 4, 1981, Secretary of Education T.H. Bell testified before the Senate Subcommittee on Taxation and Debt Management concerning tax credits for education. He stated that "While we do not yet have a final proposal, I would like to reiterate our support for a tuition tax credit along the lines of that contained in the Packwood-Moynihan-Roth bill." This bill allows refunds on tax credits whenever the credit exceeds the taxpayer's liability. The taxpayer would receive credits for 50% of education expenses with a maximum credit of $500 in 1982-83 and a maximum credit of $1000 in subsequent school years.

II. The Proposed Legislation and Student Equity

Our criterion for the equitable treatment of students is that of fiscal capacity neutrality which requires that a student's level of education expenditure not be a function of his parents' fiscal capacity.[2] We are interested in whether the proposed tax credit legislation will move us closer to or farther away from the achievement of this goal.

To judge the impact of the proposed legislation on per pupil expenditure levels, we assume that there is a concensus bill allowing a tax credit for

50% of private education expenses to a maximum credit of $300. For taxpayers with private education expenses less than $600 the tax credit would be a matching grant. It would influence the level of per pupil expenditure through its effect on the price of education expenditures. For example, a matching rate of 50% implies that each $1 of education expenditure will cost eligible taxpayers only $.50. A reduction in the price of education brought about by the matching grant will induce a greater demand for education expenditure on the part of the taxpayer.[3] For taxpayers with private education expenses greater than $600 the tax credit would be a nonmatching grant. The responsiveness of education demand to changes in nonmatching payments has been estimated and the basic finding is that education expenditure rises by less than the amount of the increase in nonmatching payments.[4] Whether the tax credit appears as a matching or nonmatching grant, it will increase the demand for private education expenditure.

Private schools in the U.S. can generally be classified into two catagories - secular private schools with high tuition levels and parochial schools with low tuition levels. The dominant users of the secular schools are wealthy taxpayers. This occurs because the decision to send one's children to private schools does not relieve the taxpayer from school taxes. The taxpayer has the choice of sending his child to public school and saving the tuition payment to the private school or of sending the child to private school and paying the tuition. Thus, the private school tuition can be looked upon as the government's "inducement" to send the child to public schools. Matched against this inducement are the utility gains associated with the difference in expenditure levels between public and private schools. Only if the utility gains associated with the higher level of private education expenditure are larger than the utility value of the government's inducement will the taxpayer

choose the private school. Since the utility of the government's inducement is smaller for the wealthy, it is natural to expect that high tuition secular schools are dominated by the wealthy.[5]

The parochial schools in the U.S. are generally low tuition schools which are used by both the rich and the poor. These schools have low labor costs which enable them to provide what is a dollar's worth of education services valued at competitive factor prices for less than a dollar. In addition, they have been able to secure some government assistance such as the public provision of transportation.

The increased demand for education expenditure at private schools which would result from the enactment of the concensus bill would have several effects. The tax credit system would induce taxpayers with students already enrolled in private schools to demand an increased level of education services (expenditures) at these schools. Tuition levels would rise to accomodate this demand. In addition, some students will be removed from public schools and placed in private schools. Tuition levels are likely to rise to ration the available spaces at existing schools. In the long run we would expect existing private schools to expand and new private schools to be founded. There seems little doubt that the overall impact of the tax credit system would be to raise the level of education expenditure enjoyed by private school users.

It is difficult to predict the impact of the legislation on the levels of per pupil expenditure at public schools. On the one hand, public per pupil expenditures may fall. This will occur if, in order to finance the tax credits, aid to public education is reduced or if the movement of students to private schools weakens political support for public school spending. On the other hand, we should recognize that although enrollments at public schools will decline, the tax base to support public education will not. Given the departure of some of their students, public schools may not reduce total expenses

by an amount that keeps the level of per pupil expenditure constant. Recognizing the downward rigidities in wages and prices that exist in our economy, a decline in public school enrollments may actually result in an increase in public per pupil expenditures. This belief is consistent with the fact that constant dollar per pupil expenditure has continued to climb throughout the 70's during a period of declining enrollments.[6]

Will the proposed legislation result in a pattern of school expenditures more in harmony with our criterion of fiscal capacity neutrality? We believe the answer is no. Because the U.S. system of public school finance has led to the wealthy dominating the use of the private secular schools, tax credits to these private school users would move us farther away from the achievement of fiscal capacity neutrality. Without a closer look at the fiscal capacity of parochial school users, we cannot unequivocally state the impact of the proposed legislation on these students. However, the majority of the nation's poor taxpayers send their children to public schools. The proposed legislation is not designed to aid the public school user and we would venture a guess that the legislation would not move us closer to achievement of fiscal capacity neutrality.

III. The Proposed Legislation and Taxpayer Equity

Our intent is to determine the likely impact of the proposed legislation on taxpayers by focusing on the behavior of two variables. We first analyze the influence of the tax credit system on the education tax rate which we define as the proportion of fiscal capacity spent on education. The other variable of interest is the education residual which is the difference between the value of education services consumed by the taxpayer's dependents and his payments to support education. Given the existence of both public and private schools, there are two possible interpretations of the phrase "payments to support education." The broad interpretation would include a taxpayer's private school expenses along with his payments to support public education when calculating

payments to support education. The other interpretation would not include the private school expenses.[7] Our conclusions about the treatment of taxpayers will depend on which interpretation we adopt.

We begin by stating the likely impact of the proposed legislation on the tax rates which support public education. Concerning the effect of the proposed legislation on tax rates imposed by local districts , there are two influences working in opposite directions. First, the legislation would cause public school enrollments to decline while leaving the local tax base unchanged. If per pupil expenditures stay constant, then a lower tax rate will be sufficient to support public education. On the other hand, if public school per pupil expenditures rise as students leave the system, the increase in the per pupil tax base may be offset by the rise in per pupil expenditures, thus leaving the local tax rate unchanged. In reality, the switch in enrollments would probably cause the local tax rate to fall but less than proportionately to the decline in enrollments.

Turning next to the impact on state education finances, many state grants to local districts are tied to the size of the local budget. Although state per pupil grants may rise, this must be matched against the state's increasing per pupil tax base. One would expect the state tax rate in support of education to decline but not in proportion to the decline in enrollments. The federal government also supports public education. If we assume that the federal government will not significantly reduce its aid to public schools in order to finance the tax credit system, then the federal portion of the education tax rate to support public education will remain constant. Our conclusion is the the proposed legislation will lead to a reduction in the tax rate to support public education.

Now assume that education expense includes private and public school expenditures and that the proportion of income spent on private and public schooling is called the comprehensive education tax rate. Our analysis has shown that both public and private per pupil expenditures will rise as a result of the proposed legislation. This rise in total education outlays can

be accomodated only with a higher (average) comprehensive education tax rate, given the constancy of the tax base. Because the revenues to support the tax credit system would be raised by the progressive federal tax system, the proposed legislation would weaken somewhat the inverse relation between the education tax rate and fiscal capacity which exists under the current U.S. system of education finance.[8]

The problem with the education tax rate as the object of analysis is that it looks only at the cost or burden side and does not consider the benefits which the burden makes possible. A variable that nets out the benefit in calculating the taxpayer's burden is the education residual. Again, we must decide whether our definition of education residual includes expenditures on private education. In the absence of a tax credit system there would be no need to make a distinction since a private school user would cover his own education expenses and the value of the residual would depend only on his payments to support public education. Because the proposed legislation gives subsidies to private education and because these subsidies will shift enrollments toward private schools, we state the impact of the proposed legislation on education residuals which take account of both public and private education expenditures.

We have argued that the introduction of a tax credit system would induce an increase in private education expenditures by an amount which is less than the value of the tax credit. Because the funds to support the tax credit system would be raised from the general tax base, private school users' tax liabilities to support the tax credit system would be less than the tax credit. Even if tax liabilities to support public education remain constant, the necessary conclusion is that the proposed legislation's grant of tax credits to private school users would increase the value of the residual for all private school users.

The impact of the legislation on the value of education residuals of public school users depends on the values of several variables.[9] A good guess is that the value of the residual would decrease. Comparing private to public school users, we can safely say that the legislation increases the residuals of private users relative to public school users.

IV. A Tax Credit System That Achieves Fiscal Capacity Neutrality

In this part we outline the structure of a hypothetical tax credit system which is capable of breaking the link between fiscal capacity and the level of per pupil expenditure. Not only can the system achieve fiscal capacity neutrality for public and private schools students but it also removes the distortion to the choice of public vs. private schools.

We assume that income is the tax base and the appropriate measure of fiscal capacity and that the federal government is the only authority who taxes for education. Tax credits are granted for educational expenses incurred at either private schools or schools operated by the local governments. Both types of schools charge tuition based on their costs and their assessment of what the market will bear.[10] Local governments have no taxing authority for education and their schools must compete for students to survive. Individuals attend the school of their choice and pay the tuition (which may be wholly or partially offset by tax credits).

Because individuals command the purchasing power for education and are free to apply this purchasing power to the school of their choice, this system incorporates the primary feature of a voucher system. However, the proposed system can be designed to guarantee that an individual's purchasing power for education is independent of his fiscal capacity. This is accomplished by drawing on Martin Feldstein's system for achieving wealth neutral-

ity among public school districts and adapting his system to achieve fiscal capacity neutrality among individual purchasers of education.[11]

The federal government can achieve fiscal capacity neutrality through a system of matching grants for taxpayers' educational expenses. The key to fiscal capacity neutrality is that the matching rate is different depending on the fiscal capacity (income) of the taxpayer. For example, the government may allow a certain taxpayer to take 50% of his educational expenses as a tax credit while allowing a richer taxpayer to take only 25% of his education expenses as a tax credit. The impact of this difference is that the poorer taxpayer faces a lower price of educational expenditure. Since he has half of the expenses paid by the government, each $1 of educational expenditure costs him only $.50 while the other taxpayer in our example faces a price of $.75 per $1 of education expense. The lower price of education induces the poorer taxpayer to increase his level of education expenditure and thereby offset his disadvantage from having less fiscal capacity.

To set the matching rates which achieve fiscal capacity neutrality, we must know how the demand for education expenditure is affected by the price of education and the fiscal capacity of taxpayers. We must estimate these behavioral parameters to know the appropriate price adjustment to offset the impact of fiscal capacity on educational expenditure. For example, if the price elasticity of education is twice as great as the income elasticity, then the impact of a 10% difference in income can be neutralized by a 5% difference in the price of education.[12]

Once these parameters have been estimated, the government must choose the income level at which it neutralizes the impact of fiscal capacity. It designates the key income level and through the subsidy system is able to

guarantee that parents will demand education as if their income were the key income level. Taxpayers with income at the key level receive no subsidies and therefore face a price of $1 for each $1 of education expenditure. Taxpayers with income levels below the key level have a proportion of their education expenses paid by the government. For example, if the price elasticity is twice as great as the income elasticity, an individual with income 10% below the key level faces a price of $.95 for each $1 of education expenditure. The system requires that individuals with fiscal capacity greater than the key level face a price of education greater than $1.

Once the key income level is chosen and we have estimated the income and price elasticities, a schedule of prices as a function of income is established. The prices are designed to eliminate the impact of income on expenditure levels. If fiscal capacity neutrality called for a price of $.80 at the $20,000 level of income, then the government would allow a taxpayer at that income level to count 20% of his education expenses as a tax credit.

As a higher income level is chosen as the key level, the whole schedule of prices is lowered and the levels of educational expenditure rise. Fiscal capacity neutrality can be achieved with any choice of key district since the criterion concerns relative levels of expenditure between rich and poor. However, the choice of too low a key income level may lead to general levels of expenditure which conflict with other criteria concerning the equitable treatment of students.

For the system to function properly the government must give refunds whenever a taxpayer's tax credits for education exceed his tax liabilities. If there were no refund provision, then a portion of the taxpaying population would not face the prices required for fiscal capacity neutrality.

The fiscal capacity neutral tax credit system produces some desirable efficiency results. The system offers parents a maximum choice of schools and allows them to select schools offering the desired level of expenditure. There need be no mismatch between actual and preferred levels of expenditure.

The system also allows us to generate the type of information generally available from market transactions. For example, tuition payments should act as a signal as to the types of schools that people want. Moreover, if there is competition in the supply of education, we would expect the kind of schools we want will be the ones forthcoming. In effect, this tax credit plan utilizes a free market system to achieve efficiency. However, unlike a complete laissez faire approach to education, the plan tampers with the distribution of purchasing power in a way that achieves fiscal capacity neutrality. That is, rather than accepting the existing distribution of income and allowing the market to provide education, the system neutralizes the impact of fiscal capacity on acquiring purchasing power for education and then allows the funds to be spent in a market type of system.

V. Fiscal Capacity Neutrality and the Treatment of Taxpayers

We now examine more closely those factors that determine the treatment of taxpayers under a fiscal capacity neutral tax credit system. Expenditures at both private and local government schools are allowable as tax credits. One's education expenses arise from two sources - (1) one's own purchases of education (at the appropriate fiscal capacity neutral price) and (2) any additional payments to the federal government which may be necessary to support the tax credit system. With this matching grant system in operation, the values of the behavioral parameters, the choice of the key income level and an agent's fiscal capacity determine whether he receives subsidies from the central

government or pays funds to the government on his purchases of education. If fiscal capacity neutrality is to be achieved, it is usually essential that the price of education be greater than $1 for certain affluent purchasers of education.

The tax rate on an individual's own purchases of education can be written as:

$$t = \frac{PE}{I} \qquad (1)$$

where

t = tax rate on own purchases of education,
P = price of a dollar's worth of education expenditure,
E = the student's expenditure level,
I = the taxpayer's income level

As income increases we know that the price of education will rise by the amount necessary to preserve fiscal capacity neutrality. Whenever the wealth elasticity is less than the price elasticity, fiscal capacity neutrality (E constant) requires P to rise by a smaller percentage than the percentage increase in income. As equation (1) shows, the tax rate will fall as a function of income in this case. Since the empirical work generally indicates that the price elasticity is greater than the income elasticity, the percentage of income spent on own purchases of education falls as income rises.

However, this effect may be offset by the progressivity of the federal tax system. The education finance system may not be self-financing in the sense that the revenue from taxpayers facing a price of education greater than $1 is not enough to cover the subsidies to those who face a price less than $1. In this case, the central fisc will have to raise revenue from its central

tax base. Since agents with higher incomes face higher tax rates, revenue from this source is raised progressively. Combining the two sources, the percentage of one's income spent on education as a function of income can either rise or fall. The greater the price elasticity is relative to the wealth elasticity and the higher the key income level, the greater the tendency for the education tax rate to fall as a function of fiscal capacity.

A System Without Recapture

Various forms of opposition have developed against the feature of certain school finance systems known as recapture. In our system, recapture requires affluent purchasers of education to face a price for each dollar's worth of education expenditure that is greater than one dollar. The overpayments associated with purchases at a price greater than $1 are the amount recaptured.

Imagine now that recapture is prohibited. The maximum price of education that an agent faces is $1 ($P_{max}$=$1). The most important effect of this constraint is that fiscal capacity neutrality will be violated. Education expenditure will be an increasing function of income for all those who face a price of $1 but who are richer than the key income level. The only way that strict income neutrality could be maintained in the face of this constraint is if the highest income level were the key income level. In this case, a price of $1 would be the highest price called for by fiscal capacity neutrality and all agents expcept the richest would face a price less than $1. The problem with this approach is that the low prices would induce extremely high levels of education expenditure and require large amounts of revenue to be raised from the general tax base.

Turning next to the influence on taxpayers of a prohibition of recapture, the outcome depends on which of two opposing effects dominates. The constraint on prices means that the proportion of income spent on one's own purchase of

education as a function of income becomes more regressive. On the other hand, since no funds are raised through recapture, large amounts of funds must be raised from the general tax base. If taxpayers with students were the only members of the tax base, then the savings of the affluent by avoiding recapture would be offset by the progressive tax system. However, when funds are raised from the general tax base, taxpayers without students share in the burden. It is reasonable to assume that the affluent with students would benefit from a prohibition of recapture.

Education residuals as a function of income depend entirely on the behavior of the education tax rate since fiscal capacity guarantees that education expenditure will not vary as a function of income. We know that the residual would fall as income increases by an amount that depends on the progressivity of the education tax system.

VI. Conclusion

The enactment of a tax credit system along the lines of those bills before the 97th Congress is likely to move us farther away from the achievement of fiscal capacity neutrality in education expenditure. The legislation would benefit private school users relative to public school users and is likely to benefit wealthy taxpayers relative to poor taxpayers.

However, a tax credit system can be designed which achieves fiscal capacity neutrality and leads to greater efficiency in the provision and consumption of education.

Footnotes

1. Marc Nerlove, "On Tuition and the Costs of Higher Education: Prolegomena to a Conceptual Framework," Journal of Political Economy (80) 1972, pg. S1279.
2. The criterion concerns the distribution of dollar inputs into the production of education and not the distribution of education output. Given the problems of defining and measuring education output and given our lack of knowledge about education production functions, the use of dollars inputs seems appropriate for now.
3. The responsiveness of educational expenditure to the price of education has been documented in numerous studies. See, for instance, Feldstein, "Wealth Neutrality and Local Choice in Public Education," American Economic Review, March 1975.
4. In 1979, the average private elementary tuition was $250 in the Northeast, $209 in the North Central States, $600 in the South and $540 in the West. The national average tuition charge for private secondary schools was approximately $1000 in 1979. In 1982 dollars, the tuition tax credit would (on average) appear as a nonmatching grant except at private elementary schools in the Northeast and North Central states. T.H. Bell, "Statement before the Senate Subcommittee on Taxation and Debt Management," mimeo., pg. 4.

   Several researchers have measured the impact of nonmatching grants on education expenditures. See David Stearn, "Effects of Alternative State Aid Formulas on the Distribution of Public School Expenditures in Massachusetts," Review of Economics and Statistics, Feb. 1973, 91-97. See also Feldstein, Ibid.
5. See Inman, "Optimal Fiscal Reform of Metropolitan Schools: Some Simulation Results," AER, March 1978.

6. Tax Foundation, Facts and Figures, (Washington, D.C.), Bi-annual editions.

7. It is a value judgment which interpretation of the education tax rate is appropriate. Some would argue that the only burden to be considered is that felt in one's role as taxpayer, namely, raising the revenue which supports public education. They would argue that private education is purchased at one's own discretion and like any other privately purchased good should not count in assessing one's burden to support publically provided goods. Those who favor the broader interpretation would argue that private and public education are basically the same good, that the law requires all children to attend school and thus the cost of private school should be recognized as part of an agent's education spending. In addition, the departure of student from public schools will lower the tax rate needed to support public education. Since the financial burden of public school users is lessened, the corresponding increase in the burden of private school users should be recognized.

8. Although the federal tax system is progressive and state and local tax systems generally employ uniform tax rates across their jurisdictions, the current education tax rate to support public education is, in most cases, inversely related to agents' fiscal capacities. This arises because local school districts' (and states') tax bases differ markedly in terms of fiscal capacity per student. Jurisdictions with low fiscal capacity must levy high tax rates to generate acceptable education expenditure levels.

9. Per pupil expenditure levels may rise at public schools and the tax rate to support public education may fall, however, public school users will be taxed to support the tax credit system. We have argued that the comprehensive tax rate will rise. The precise outcome depends on the behavioral parameters of both public and private school users.

10. It is important that tuition levels not be regulated. If entry into education provision is not blocked, then competitive pressures will keep tuition levels in line. In addition, unregulated tuition allows a market mechanism to ration the available education facilities and carry signals about the education types and levels that are most in demand.

11. Because the tax credit system is national in scope, taxpayers of equal fiscal capacity face the same price of education and face the same tax rate no matter what the fiscal capacities of the local and state jurisdictions in which they happen to reside.